

Claims

1. An indium oxide-tin oxide powder comprising an In-Sn oxide as a predominant component, characterized in that the oxide powder contains no compound oxide ($\text{In}_4\text{Sn}_3\text{O}_{12}$) detectable through X-ray diffraction and has a SnO_2 solid solution amount in In_2O_3 of 2.3 mass% or more, the SnO_2 solid solution amount being calculated from the ratio between integral diffraction intensity attributed to In_2O_3 (222) and integral diffraction intensity attributed to SnO_2 (110), and the ratio between In_2O_3 content and SnO_2 content obtained from an In element concentration and a Sn element concentration through ICP analysis.

2. An indium oxide-tin oxide powder according to claim 1, wherein the SnO_2 solid solution amount in In_2O_3 is 2.4 mass% or more.

3. An indium oxide-tin oxide powder according to claim 1 or 2, which has a tin content of 2.3 to 45 mass% as calculated on the basis of SnO_2 .

4. An indium oxide-tin oxide powder according to any of claims 1 to 3, which is produced through feeding, into an oxidizing atmosphere serving as a heat source, an indium-tin alloy in the form of a liquid stream, liquid droplets, or powder or an ITO powder; and capturing and collecting the formed product in the form of microparticles by means of a fluid.

5. An indium oxide-tin oxide powder according to claim

4, wherein the fluid is a fluid of atomized liquid.

6. An indium oxide-tin oxide powder according to claim 4 or 5, wherein the formed microparticles flow at a maximum speed of 150 m/sec or less, when the microparticles are captured by means of the liquid fluid.

7. A sputtering target characterized by being produced through sintering an indium oxide-tin oxide powder as recited in any of claims 1 to 6.